Amendment to the Abstract:

Please cancel the previous Abstract. A revised Abstract is attached.

ABSTRACT

A modular prosthesis is provided for repairing an aortic aneurysm in an aorta extending from a heart of a patient. The modular prosthesis includes a prosthesis portion expandable radially between a collapsed configuration and an expanded configuration and extending longitudinally between a proximal end and a distal end, wherein the prosthesis portion has a single inlet at the proximal end. The modular prosthesis also includes a proximal prosthesis portion expandable radially between a collapsed configuration and an expanded configuration and having a proximal end and a distal end, wherein the proximal prosthesis portion has a single inlet at the proximal end and a single outlet at the distal end, the proximal prosthesis portion being formed separately from the prosthesis portion and being adapted to lie in the aorta with the proximal end pointing toward the heart and sized to fit a diameter of the aorta. Each of the prosthesis portion and the proximal prosthesis portion includes a flexible layer and an expandable stent radially supporting the flexible layer along substantially the entire length thereof. Joining means is provided for intraluminally joining the distal end of the proximal prosthesis portion to the proximal end of the prosthesis portion.